concurrence of the Administrator, prototype grain inspection or weighing equipment may be tested by the Service for official use.

(2) *Determination by Service.* Upon a determination of need, the Service may develop, contract for, or purchase and test prototype grain inspection or weighing equipment for official use.

§ 800.218 Review of rejection or disapproval of equipment.

Any person desiring to complain of a rejection or disapproval of equipment by official personnel or of any alleged discrepancy in the testing of equipment under the Act by official personnel or by approved scale testing organizations may file a complaint with the Service.

§ 800.219 Conditional approval on use of equipment.

(a) *Approval.* Equipment that is in use under the Act on the effective date of this section shall be considered conditionally to have been adopted and approved by the Service.

(b) *Limitation on approval.* This conditional approval shall not bar a later rejection or disapproval of the equipment by the Service upon a determination that the equipment (1) should be rejected for official use, or (2) is not functioning in an approved manner, or (3) is not producing results that are accurate within prescribed tolerances, or (4) is producing results that are otherwise not consistent with the objectives of the Act.

PART 801—OFFICIAL PERFORMANCE REQUIREMENTS FOR GRAIN INSPECTION EQUIPMENT

Sec.

AUTHORITY: 7 U.S.C. 71–87k

SOURCE: 51 FR 7050, Feb. 28, 1986, unless otherwise noted.

§ 801.1 Applicability.

The requirements set forth in this part 801 describe certain specifications, tolerances, and other technical requirements for official grain inspection equipment and related sample handling systems used in performing inspection services under the Act.

§ 801.2 Meaning of terms.

(a) *Construction.* Words used in the singular form in this part shall be considered to imply the plural and vice versa, as appropriate.

(b) *Definitions.* The definitions of terms listed in the part 800 shall have the same meaning when the terms are used in this part 801. For the purposes of this part, the following terms shall have the meanings given for them below.

(1) *Avoirdupois weight.* A unit of weight based on a pound of 16 ounces.

(2) *Barley pearler.* An approved laboratory device used to mechanically dehull kernels of barley or other grain.

(3) *Deviation from standard.* In testing inspection equipment for accuracy, the variation between (i) the individual test result from the equipment that is being tested and (ii) the reference standard or the individual test result from the standard (or National standard) equipment, as applicable.

(4) *Direct comparison method.* An equipment testing procedure wherein transfer standards are tested at the same time and place to compare the performance of two or more units of the same inpsection equipment. One unit of the equipment used in the test shall be standard inspection equipment. (See also sample exchange method).

(5) *Diverter-type mechanical sampler (primary).* An approved device used to obtain representative portions from a flowing stream of grain.

(6) *Diverter-type mechanical sampler (secondary).* An approved device used to subdivide the portions of grain obtained with a diverter-type mechanical sampler (primary).

(7) *Divider*. An approved laboratory device used to mechanically divide a sample of grain into two or more representative portions.

(8) *Dockage tester*. An approved laboratory device used to mechanically separate dockage and/or foreign material from grain.

(9) *Maintenance tolerance*. An allowance established for use in determining whether inspection equipment should be approved for use in performing official inspection services.

(10) *Mean deviation from standard*. In testing inspection equipment for accuracy, the variation between (i) the average for the test results from the equipment that is being tested and (ii) the reference standard or the average of the test results from the standard (or National standard) equipment, as applicable.

(11) *Metric weight*. A unit of weight based on the kilogram of 1,000 grams.

(12) *Moisture meter*. An approved laboratory device used to indicate directly or through conversion and/or correction tables the moisture content of grain including cereal grains and oil seeds.

(13) *National standard inspection equipment*. A designated approved unit of inspection equipment used as the reference in determining the accuracy of standard inspection equipment.

(14) *Official inspection equipment*. Equipment approved by the Service and used in performing official inspection services.

(15) *Sample exchange method*. An equipment testing procedure wherein transfer standards are tested to compare the performance of two or more units of the same inspection equipment installed at different locations. One unit of the equipment used in the test shall be standard inspection equipment. (See also direct comparison method.)

(16) *Sieves*. Approved laboratory devices with perforations for use in separating particles of various sizes.

(17) *Standard inspection equipment*. An approved unit of inspection equipment that is designated by the Service for use in determining the accuracy of official inspection equipment.

(18) *Test weight*. The avoirdupois weight of the grain or other material in a level-full Winchester bushel.

(19) *Test weight apparatus*. An approved laboratory device used to measure the test weight (density) of a sample of grain.

(20) *Transfer standard*. The medium (device or material) by which traceability is transferred from one inspection equipment standard unit to another unit.

(21) *Winchester bushel*. A container that has a capacity of 2,150.42 cubic inches (32 dry quarts).

§ 801.3 Tolerances for barley pearlers.

The maintenance tolerances for barley pearlers used in performing official inspection services shall be:

Item	Tolerance
Timer switch:	
0 to 60 seconds	±5 seconds, deviation from standard clock
61 to 90 seconds ...	±7 seconds, deviation from standard clock
Over 90 seconds	±10 seconds, deviation from standard clock
Pearled portion	±1.0 gram, mean deviation from standard barley pearler using barley

§ 801.4 Tolerances for dockage testers.

The maintenance tolerances for dockage testers used in performing official inspection services shall be:

Item	Tolerance
Air separation	±0.10 percent, mean deviation from standard dockage tester using Hard Red Winter wheat
Riddle separation	±0.10 percent, mean deviation from standard dockage tester using Hard Red Winter wheat
Sieve separation	±0.10 percent, mean deviation from standard dockage tester using Hard Red Winter wheat
Total dockage separation.	±0.15 percent, mean deviation from standard dockage tester using Hard Red Winter wheat

§ 801.5 Tolerance for diverter-type mechanical samplers.

The maintenance tolerance for diverter-type mechanical samplers (primary, or primary and secondary in combination) used in performing official inspection services shall be ±10 percent, mean deviation from standard sampling device using corn or the same

type of grain that the system will be used to sample.

§ 801.6 Tolerances for moisture meters.

(a) The maintenance tolerances for Motomco 919 moisture meters used in performing official inspection services shall be:

(1) Headquarters standard meters:

Moisture range	Tolerance	
	Direct comparison	Sample exchange
Low	±0.05 percent moisture, mean deviation from National standard moisture meter using Hard Red Winter wheat	
Mid	±0.05 percent moisture, mean deviation from National standard moisture meter using Hard Red Winter wheat	
High	±0.05 percent moisture, mean deviation from National standard moisture meter using Hard Red Winter wheat	

(2) All other than Headquarters standard meters:

Moisture range	Tolerance	
	Direct comparison	Sample exchange
Low	±0.15 percent moisture, mean deviation from standard moisture meter using Hard Red Winter wheat	±0.20 percent moisture, mean deviation from standard moisture meter using Hard Red Winter wheat
Mid	±0.10 percent moisture, mean deviation from standard moisture meter using Hard Red Winter wheat	±0.15 percent moisture, mean deviation from standard moisture meter using Hard Red Winter wheat
High	±0.15 percent moisture, mean deviation from standard moisture meter using Hard Red Winter wheat	±0.20 percent moisture, mean deviation from standard moisture meter using Hard Red Winter wheat

(b) The maintenance tolerances for GAC 2100 moisture meters used in performing official inspection services shall be:

(1) Headquarters standard meters. By direct comparison using mid-range Hard Red Winter wheat, ±0.05% mean deviation for the average of the Headquarters standard moisture meters.

(2) All other than Headquarters standard meters. By sample exchange using mid-range Hard Red Winter wheat, ±0.15% mean deviation from the standard meter.

[63 FR 34554, June 25, 1998]

§ 801.7 Reference methods and tolerances for near-infrared spectroscopy (NIRS) analyzers.

(a) *Reference methods.* (1) The chemical reference protein determinations used to reference and calibrate official NIRS instruments shall be performed in accordance with ''Comparison of Kjeldahl Method for Determination of Crude Protein in Cereal Grains and Oilseeds with Generic Combustion Method: Collaborative Study,'' July/August 1993, Ronald Bicsak, Journal of AOAC International Vol. 76, No. 4, 1993, and subsequently approved by the AOAC International as the Combustion method, AOAC International Method 992.23. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Director, Technical Services Division, Federal Grain Inspection Service, 10383 North Executive Hills Blvd., Kansas City, MO 64153–1394. Copies may be inspected at the above address or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal__register/*

code__of__federal__regulations/ibr__locations.html.

(2) The chemical reference starch determination used to reference and calibrate official NIRS instruments shall be performed in accordance with the Corn Refiners Association Method A–20, Analysis for Starch in Corn, Second revision, April 15, 1986, Standard Analytical Methods of the Member Companies of the Corn Refiners Association, Inc. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Director, Technical Services Division, Federal Grain Inspection Service, 10383 North Executive Hills Blvd., Kansas City, MO 64153–1394. Copies may be inspected at the above address or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal__register/code__of__federal__regulations/ibr__locations.html*.

(b) *Tolerances*—(1) *NIRS wheat protein analyzers*. The maintenance tolerances for the NIRS analyzers used in performing official inspections for determination of wheat protein content shall be ±0.15 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the Combustion method, AOAC International Method 992.23.

(2) *NIRS soybean oil and protein analyzers*. The maintenance tolerances for the NIRS analyzers used in performing official inspections for determination of soybean oil shall be ±0.20 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the FGIS solvent oil extraction method; and for determination of protein content shall be ±0.20 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the Combustion method, AOAC International Method 992.23.

(3) *NIRS corn oil, protein, and starch analyzers*. The maintenance tolerances for the NIRS analyzers used in performing official inspections for determination of corn oil shall be ±0.20 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the FGIS solvent oil extraction method; for determination of protein content shall be ±0.30 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the Combustion method, AOAC International Method 992.23; and for determination of starch content shall be ±0.35 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the Starch method, Corn Refiners Association Method A–20.

(4) NIRS barley protein analyzers. The maintenance tolerances for the NIRS analyzers used in performing official inspections for determination of barley protein content are 0.20 percent mean deviation from the national standard NIRS instruments, which are referenced and calibrated to the Combustion method, AOAC International Method 992.23.

[63 FR 35505, June 30, 1998, as amended at 69 FR 18803, Apr. 9, 2004; 71 FR 65373, Nov. 8, 2006]

§ 801.8 Tolerances for sieves.

The maintenance tolerances for sieves used in performing official inspection services shall be:

(a) Thickness of metal: ±0.0015 inch.

(b) Accuracy of perforation: ±0.001 inch from design specification.

(c) Sieving accuracy:

Sieve description	Tolerance	
	Direct comparison	Sample exchange
.064×3/8 inch oblong	±0.2 percent, mean deviation from standard sieve using wheat.	±0.3 percent, mean deviation from standard sieve using wheat
5/64×3/4 inch slotted	±0.3 percent, mean deviation from standard sieve using barley.	±0.5 percent, mean deviation from standard sieve using barley
5 5/64×3/4 inch slotted	±0.5 percent, mean deviation from standard sieve using barley.	±0.7 percent, mean deviation from standard sieve using barley
6/64×3/4 inch slotted	±0.7 percent, mean deviation from standard sieve using barley.	±1.0 percent, mean deviation from standard sieve using barley

§ 801.9 Tolerances for test weight apparatuses.

The maintenance tolerances for test weight per bushel apparatuses used in performing official inspection services shall be:

Item	Tolerance
Beam/scale accuracy	±0.10 pound per bushel deviation at any reading, using test weights
Overall accuracy	±0.15 pound per bushel, mean deviation from standard test weight apparatus using wheat

§ 801.10 [Reserved]

§ 801.11 Related design requirements.

(a) *Suitability*. The design, construction, and location of official sampling and inspection equipment and related sample handling systems shall be suitable for the official sampling and inspection activities for which the equipment is to be used.

(b) *Durability*. The design, construction, and material used in official sampling and inspection equipment and related sample handling systems shall assure that, under normal operating conditions, operating parts will remain fully operable, adjustments will remain reasonably constant, and accuracy will be maintained between equipment test periods.

(c) *Marking and identification*. Official sampling and inspection equipment for which tolerances have been established shall be permanently marked to show the manufacturer's name, initials, or trademark; the serial number of the equipment; and the model, the type, and the design or pattern of the equipment. Operational controls for mechanical samplers and related sample handling systems, including but not limited to pushbuttons and switches, shall be conspicuously identified as to the equipment or activity controlled by the pushbutton or switch.

(d) *Repeatability*. Official inspection equipment when tested in accordance with §§ 800.217 and 800.219 shall, within the tolerances prescribed in §§ 801.3 through 801.10, be capable of repeating its results when the equipment is operated in its normal manner.

(e) *Security*. Mechanical samplers and related sample handling systems shall provide a ready means of sealing to deter unauthorized adjustments, removal, or changing of component parts or timing sequence without removing or breaking the seals; and otherwise be designed, constructed, and installed in a manner to prevent deception by any person.

(f) *Installation requirements*. Official sampling and inspection equipment and related sample handling systems shall be installed (1) at a site approved by the Service, (2) according to the manufacturer's instructions, and (3) in such a manner that neither the operation nor the performance of the equipment or system will be adversely affected by the foundation, supports, or any other characteristic of the installation.

§ 801.12 Design requirements incorporated by reference.

(a) *Moisture meters*. All moisture meters approved for use in official grain moisture determination and certification shall meet applicable requirements contained in the FGIS Moisture Handbook and the General Code and Grain Moisture Meters Code of the 1991 edition of the National Institute of Standards and Technology's (NIST) Handbook 44, ''Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices.'' Pursuant to the provisions of 5 U.S.C. 552(a), the materials in Handbook 44 are incorporated by reference as they exist on the date of approval and a notice of any change in these materials will be published in the FEDERAL REGISTER.

The NIST Handbook is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20403. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

The following Handbook 44 requirements are not incorporated by reference:

General Code (1.10.)

G-S.5.5. Money Values, Mathematical Agreement

G-T.1. Acceptance Tolerances

G-UR.3.3. Position of Equipment
G-UR.3.4. Responsibility, Money-Operated Devices
Grain Moisture Meters (5.56.)
N.1.1. Transfer Standards
N.1.2. Minimum Test
N.1.3. Temperature Measuring Equipment
T.2. Tolerance Values
T.3. For Test Weight Per Bushel Indications or Recorded Representations
UR.3.2. Other Devices not used for Commercial Measurement
UR.3.7. Location
UR.3.11. Posting of Meter Operating Range

(b) [Reserved]

[57 FR 2673, Jan. 23, 1992, as amended at 69 FR 18803, Apr. 9, 2004]

PART 802—OFFICIAL PERFORMANCE AND PROCEDURAL REQUIREMENTS FOR GRAIN WEIGHING EQUIPMENT AND RELATED GRAIN HANDLING SYSTEMS

Sec.
802.0 Applicability.
802.1 Qualified laboratories.

AUTHORITY: Pub. L. 94–582, 90 Stat. 2867, as amended (7 U.S.C. 71 *et seq.*).

§ 802.0 Applicability.

(a) The requirements set forth in this part 802 describe certain specifications, tolerances, and other technical requirements for grain weighing equipment and related grain handling systems used in performing Class X and Class Y weighing services, official inspection services, and commercial services under the Act. All scales used for official grain weight and inspection certification services provided by FGIS must meet applicable requirements contained in the FGIS Weighing Handbook, the General Code, the Scales Code, the Automatic Bulk Weighing Systems Code, and the Weights Code of the 2008 edition of National Institute of Standards and Technology (NIST) Handbook 44, ''Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices'' (Handbook 44); and NIST Handbook 105–1 (1990 Edition), ''Specifications and Tolerances for Reference Standards and Field Standard Weights and Measures,'' (Handbook 105–1). These requirements are confirmed to be met by having National Type Evaluation Program type approval. Scales used for commercial purposes will be required to meet only the applicable requirements of the 2008 edition of the NIST Handbook-44. Pursuant to the provisions of 5 U.S.C. 552(a), with the exception of the Handbook 44 requirements listed in paragraph (b), the materials in Handbooks 44 and 105–1 are incorporated by reference as they exist on the date of approval and a notice of any change in these materials will be published in the FEDERAL REGISTER. This incorporation by reference was approved by the Director of the Federal Register on March 8, 2011, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The NIST Handbooks are for sale by the National Conference of Weights and Measures (NCWM), 1135 M Street, Suite 110, Lincoln, Nebraska 68508. Information on these materials may be obtained from NCWM by calling 402–434–4880, by E-mailing *nfo@ncwm.net*, or on the Internet at *http://www.nist.gov/owm*.

(b) The following Handbook 44 requirements are not incorporated by reference:

Scales (2.20)

S.1.8. Computing Scales
S.1.8.2. Money-Value Computation
S.1.8.3. Customer's Indications
S.1.8.4. Recorded Representations, Point of Sale
S.2.5.2. Jeweler's, Prescription, & Class I & II Scales
S.3.3. Scoop Counterbalance
N.1.3.2. Dairy-Product Test Scales
N.1.5. Discrimination Test (Not adopted for Grain Test Scales only)
N.1.8. Material Tests
N.3.1.2. Interim Approval
N.3.1.3. Enforcement Action For Inaccuracy
N.4. Coupled-in-Motion Railroad Weighing Systems
N.6. Nominal Capacity of Prescription Scales
T.1.2. Postal and Parcel Post Scales
T.2.3. Prescription Scales
T.2.4. Jewelers' Scales (all sections)
T.2.5. Dairy—Product—Test Scales (all sections)
T.N.3.9. Materials Test on Customer—Operated Bulk—Weighing Systems for Recycled Materials
UR.1.4. Grain Test Scales: Value of Scale Divisions
UR.3.1. Recommended Minimum Load
UR.3.1.1. Minimum Load, Grain Dockage